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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/530,469	04/06/2005	Christian Schmaranzer	SCHMARANZER ET AL - 1 PCT	4891
25889	7590	08/16/2007	EXAMINER	
WILLIAM COLLARD COLLARD & ROE, P.C. 1077 NORTHERN BOULEVARD ROSLYN, NY 11576			ABOAGYE, MICHAEL	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/530,469	Applicant(s) SCHMARANZER ET AL.	
	Examiner Michael Aboagye	Art Unit 1725	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 June 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2,3,5 and 7-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2,3,5 and 7-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 April 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 2, 8 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Bertels (US Patent No. 3,202,793).

Bertels discloses a method for joining a sheets of aluminum material to a sheet of ferrous metal or (steel) material comprising: providing the iron or steel with a zinc coating (column 1, lines 30-38, column 2, lines 2, lines 4-15 and column 6, line 35-40) and forming butt joint between the sheets using aluminum filler (column 1, lines 15-21, and lines 66-70); said filler melting in a region bridging the butt-joint on both surfaces of the sheets to form a seam consisting of a welding joint with the aluminum material sheet and a soldering joint with the iron sheet; said soldering joint having a width extending along the iron sheet (figures 1-6, column 4, lines 35-60); wherein the sheet made of iron material is provided with a chamfer on at least one side of the sheet prior to the application of the coating in the region of the joint (see figures 5a and 5b). Bertels further shows two sheets joined with a surface lying on one side in a common plane after the application of the weld seam in the region of the joint (see, figures 1 and 8). Bertels also in figure 6 shows cold forming the joined sheets by bending.

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In figures 5a-5c and 6 Bertels, shows a seam joint having a substantially large thickness compared to the thickness of the workpieces, a width "b" of the seam "35" measuring 8 mm and a sheet thickness of 2 mm, said seam width is at least three times the thickness of the sheet (column 4, lines 50-59).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over either Bertels in view of Persson (US Patent No. 2,719,900).

Bertels as above teaches cold forming the joined sheet but does not expressly teach, the step of flattening by plastic deformation after the application of the filler.

However Persson, teaches a welding process, forming a weld bead or seam, wherein the weld bead or seam is deformed plastically or flattened by the application of a roller thereby consolidating the weldment (see, Persson, column 2, lines 45-55).

It would have been obvious to one of ordinary skill in the art at the time the applicants' invention was made to have modified the methods of Bertels with the application of a roller to plastically deform the weld seam as taught by Persson in order

to consolidate the weld seam which by so doing will enhance the strength of the bond (see, Persson, column 2, lines 45-55).

5. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over either Bertels (US Patent No. 3,202,793) in view of Kunz et al. US Patent No. 6,478,886).

Bertels does not expressly teach, wherein the weld seam between the two sheets as formed by the filler can be covered by a corrosion protection layer on at least one side of the sheets in the transitional region to the coated iron material, especially a coat of lacquer.

However Kunz et al. teaches a sealing for metallic members including steel or ferrous materials, said sealing step comprising applying zinc or zinc alloy coating followed by a lacquer, wherein said sealing provides excellent protection against corrosion (see Kunz et al. column 3, lines 18-26).

It would have been obvious to one of ordinary skill in the art at the time the applicants' invention was made to have modified either of the methods of Bertels by covering the weld seam formed by the filler on at least one side of the sheets the transitional region of iron material with a corrosion protection layer made a coat of lacquer in order to complement the corrosion protection afforded by the zinc layer (see Kunz et al. column 3, lines 18-26).

6. Claims 7 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bertels (US Patent No. 3,202,793) in view of Frings et al. (US Patent No. 4,827,100).

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Bertels discloses a method for joining a rolled sheet of aluminum material to a rolled sheet of ferrous metal or (steel) material comprising: providing the iron or steel with a zinc coating (column 1, lines 30-38, column 2, lines 2, lines 4-15 and column 6, line 35-40) and forming butt joint between the sheets using aluminum filler (column 1, lines 15-21, and lines 66-70); said filler melting in a region bridging the butt-joint on both surfaces of the sheets to form a seam consisting of a welding joint with the aluminum material sheet and a soldering joint with the iron sheet; said soldering joint having a width extending along the iron sheet (figures 1-6, column 4, lines 35-60); wherein the sheet made of iron material is provided with a chamfer on at least one side of the sheet prior to the application of the coating in the region of the joint (see figures 5a and 5b). Bertels further shows two sheets joined with a surface lying on one side in a common plane after the application of the weld seam in the region of the joint (see, figures 1 and 8).

In figures 5a-5c and 6 Bertels, shows a seam of a joint having a substantially large thickness compared to the thickness of the workpieces, a width "b" of the seam "35" measuring 8 mm and a sheet thickness of 2 mm, said seam width is at least three time the thickness of the sheet which does not fracture under plastic deformation (column 4, lines 50-59).

Bertels does not expressly teach deforming the connecting seam.

However, Frings et al. teaches process of making shaped member from a sheet pieces (37, 38, figure 5), butt welding the abutted ends of the sheet to form a composite sheet and converting said composite sheet into a shaped member by pressing or deep

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drawing (note the examiner interprets this forming process as including deforming the connecting seam, because the entire length of the composite sheet including the joint or the seam portion is subject to deformation during the deep drawing operation, furthermore deep drawing involves flattening the weld seam (Frings et al., abstract and column1, line 56-column 2, lines 37).

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to form a shaped members by cold forming the joined or composites sheet of Bertels as taught by Frings et al. since welding unshaped sheets prior to the shape forming step is much cost effective since welding unshaped members to one another relatively does not require elaborate positioning fixtures (Frings et al., column 2, lines 1-9).

Response to Arguments

7. The examiner acknowledges the applicants' amendment received by USPTO on June 07, 2007. Claims 2, 3, 5 and 7-10 remain under consideration in the application.

8. Applicant's arguments filed June 07, 2007 have been fully considered but they are not persuasive.

Regarding the applicant's argument that Bertels does not teach or suggest a joint seam of width measuring at least three times the thickness of the iron sheet. It is noted that in figures 5a-5c and 6 Bertels, shows a seam of a joint between two sheet or members (32, 31), wherein a width "b" of the seam "35" measures 8 mm and a sheet

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thickness measures 2 mm (also see, column 4, lines 50-59). By these dimensions, the examiner interprets said seam width to be at least three times the thickness of the sheet.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Aboagye whose telephone number is 571-272-8165. The examiner can normally be reached on Mon - Fri 8:30am - 5pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jonathan Johnson can be reached on 571-272-1177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



JONATHAN JOHNSON
PRIMARY EXAMINER



Michael Aboagye
Assistant Examiner
Art Unit 1725

08/08/2007

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